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PRELIMINARY HANDBOOK OF THE COLEOPTERA OF NORTHEASTERN AMERICA.

BY WILLIAM BEUTENMULLER.

(Continued from Vol. IV, p. 49.)

The following description of the species of *Tachys*, may be of service to those desiring to identify their species. The genus needs revision and a comparison of the types of the species must be made before any synopsis can be prepared.

T. proximus Say.—Head and thorax piceous; antennæ rufous; thorax transversely subquadrate, slightly contracted behind; posterior angles rectangular; dorsal line distinct, basal ones indented; elytra testaceous with a black spot on the middle hardly attaining the margin, scutellar region dusky; striæ very obtuse, obsolete, wanting at sides and apex, impunctured, intervals convex; underside piceous, paler at tip; feet testaceous. Length 2.5 mm.

Habitat: New York, New Jersey, Pennsylvania, Ohio.

T. scitulus Lec.—Flavo-testaceous, glossy; head dark brown, front black; thorax convex, rounded at sides, retracted behind, hind angles obtuse, not rounded; margin behind the middle reflexed; elytra broader than the thorax, elongate, somewhat convex; flavo-testaceous with a dark brown fascia behind the middle; sutural stria entire, recurved behind; second stria abbreviated; remaining striæ almost obsolete; fourth interval with a large piliferous puncture before the middle and one near the apex; marginal stria much abbreviated anteriorly; underside rufo-piceous; legs testaceous. Length, 2.5 mm.

Habitat: New York, New Jersey, Pennsylvania, Ohio.

T. pumilus Dej.—Rufo-testaceous; thorax subquadrate, hind angles sub-acute; elytra oblong-oval, shining bluish behind; first and second striæ distinct, external striæ obsolete, with impressed punctures; underside blackish brown; legs testaceous. Length, 2 mm.

Habitat: Illinois, Florida.

T. corruscus Lec.—Piceous, with a bluish reflection, shining; thorax broader than long, sides rounded, slightly retracted behind, base at each side obliquely truncate; hind angles strongly obtuse, disc slightly convex; elytra much broader than the thorax, elongate, slightly narrower anteriorly, subconvex, with two piliferous punctures; sutural stria deep, entire, almost touching the base and strongly recurved be-

hind; remaining striæ obsolete; marginal stria abbreviated anteriorly, with four punctures at the humeri; legs testaceous. Length, 2.25 mm.

Habitat: New York and westward to the Rocky Mountains.

T. ventricosus *Lec.*—Piceous, glossy; head and thorax somewhat rufous; thorax slightly convex, transverse, somewhat narrowed on each side behind, hind angles obtuse, slightly prominent; elytra ovate, broader than the thorax, bipunctate, sutural stria deep posteriorly, remaining striæ obsolete; legs and antennæ flavo-testaceous. Length, 2.5 mm.

Habitat: New York and southward.

T. lævis *Say.*—Piceous, body tinted with rufous; head rather darker; antennæ paler at base; palpi whitish; thorax transversely subquadrate, hardly narrowed behind, lateral edge not excurved behind, angles slightly obtuse, angular, basal edge nearly rectilinear, dorsal line obsolete, basal ones wanting; elytra not punctured and without striæ, except an obsolete sutural one; legs testaceous. Length, 1.5 mm.

Habitat: New York, New Jersey, Pennsylvania, Ohio.

T. pallidus *Chd.*—Elongate, head and thorax reddish-testaceous, elytra darker, tips paler; legs palpi, and base of antennæ pale testaceous; thorax broader than long, sides rounded, feebly sinuate before the hind angles which are acute, surface slightly convex; elytra slightly wider than the thorax, sides feebly arcuate, sutural stria continuous, other striæ almost obsolete, near the inner basal angle is a small circular wart-like elevation. Length, 2.3 mm.

Habitat: New Jersey.

T. occultator *Casey.*—Reddish-testaceous, head nearly black; legs pale testaceous; form robust; thorax with sides strongly rounded, feebly sinuate behind; posterior angle rectangular, prominent; median line feeble; elytra distinctly wider than the thorax, sides feebly arcuate, sutural stria strongly marked, arcuate without, then a feeble second stria, and beyond traces of a third stria; two minute punctures; marginal stria interrupted. Length, 2.8 mm.

Habitat: New Jersey (Cape May).

T. nanus *Gyll.*—Deep black, polished, antennæ brown, base and palpi and legs rufous; thorax nearly as broad as the elytra, somewhat narrowed and slightly sinuate behind; angles rectangular, basal edge rectilinear; elytra with dorsal stria, outer striæ obsolete, impunctured, lateral stria wanting; feet piceous. Length, 2.25 mm.

Habitat: N. E. America. Usually found under bark of decaying trees.

T. flavicauda Say.—Black, elytra from near the middle to the tip pale yellowish; antennæ, labrum and palpi pale rufous; thorax transverse, quadrate, broadest in the middle, not contracted behind, hind angles rectangular; basal edge rectilinear; elytra with striæ impunctured, wanting at the sides and tips, intervals convex; feet pale rufous; venter piceous at the tip. Length, 1.5 mm.

Habitat: N. E. America. Common under bark of decaying trees.

T. ænescens Lec.—Pale rufo-piceous, head dark brown, elongate; antennæ testaceous, apex fuscous; thorax transverse, quadrate, sides slightly rounded, base on each side oblique, hind angles obtuse and a little elevated, not rounded, disc convex; elytra flat, with bluish reflection, broader than the thorax, sides almost parallel, slightly narrower anteriorly, apex truncately rounded, external striæ obliterated, punctured, with 5 or 6 striæ moderately distinct, a little deeper behind, and nearly touching the base; lateral stria broadly interrupted; under side rufo-piceous; feet pale testaceous. Length, 2.25 mm.

Habitat: Arkansas, Georgia.

T. tripunctatus Say.—Piceous, head and thorax darker; antennæ light brown, paler at base; palpi yellowish; thorax with the dorsal line distinct, terminating on the basal margin in an impressed puncture, on each side of which is another rather smaller puncture, basal lines much dilated and deeply undulating the posterior edge of the thorax; elytra with about four rather obtuse striæ, not extending to the tip or base, lateral striæ wanting, except a marginal one which is interrupted, on each side of scutel and on the humeri is an indention. Length, 2.2 mm.

Habitat: New York, New Jersey, Pennsylvania.

T. vivax Lec.—Rufo-piceous, lateral margin of elytra rufo-testaceous, dilated at the apex and humeri, thorax transversely quadrate, hind angles acute, base foveolate, sides strongly rounded before the middle, straight behind the middle, disc moderately convex, longitudinal line fine, transverse anterior impression absent, posterior deep with three large punctures at the middle; elytra broader than the thorax, convex, sutural stria entire, third and fourth striæ obliterated behind; third stria with two punctures, marginal stria interrupted. Legs testaceous. Length, 2.5 mm.

Habitat: New York, Pennsylvania, Ohio and westward.

T. capax Lec.—Convex, shining black; antennæ rufo-piceous, legs rufo-testaceous; thorax strongly rounded at the sides, slightly

sinuate behind, angles rectangular and with a short carina, dorsal line moderately distinct, before the base are three punctures and at each side foveolate; elytra oblong-oval, a little broader than the thorax, bipunctate, sutural stria, deep and entire, second obliterated at apex, third less distinct and lateral stria obliterated. Length, 3.25 mm.

Habitat : New Jersey, District of Columbia and westward. Allied to *T. tripunctatus* and *vivax*, but is more convex than the first and has the sides of the thorax much more rounded than the second.

T. xanthopus Dej.—Blackish brown, shining, antennæ at base and legs testaceous; thorax transversely subquadrate, foveolate on each side posteriorly, angles rectangular; elytra ovate, two impressed punctures, two dorsal striæ distinct, external striæ obsolete. Length, 1.75 mm.

Habitat : New York, New Jersey and westward.

T. ferrugineus Dej.—Rufo-piceous, elytra paler at the sides, antennæ and legs testaceous; thorax strongly rounded at the sides before the middle, straight behind, disc subconvex, dorsal line fine, posterior transverse impression deep with three large punctures at the middle; at the angle deeply impressed; elytra convex, sutural stria deep and entire, second stria abbreviated at each end, third slightly evident with two punctures, marginal stria broadly interrupted. Length, 2.25 mm.

Habitat : Massachusetts, New York, New Jersey, Ohio, Illinois, Arkansas, Colorado.

T. incurvus Say.—Piceous, elytra with a honey yellow line from the humeri to the apex, where it is a little dilated, antennæ honey yellow; under side piceous; legs honey yellow; thorax a little contracted gradually to the base, dorsal line slight, basal transverse line deep and wrinkled; elytra polished, with a deep sutural stria, second stria obsolete and an interrupted stria on the lateral margin; a dilated indentation each side of the scutel, and a smaller one on the humerus. The dilated vitta on each side curves near its tip a little towards the suture. Length, 2 mm.

Habitat : N. E. America. Common; in the hills of the red ant.

T. nebulosus Chd.—Closely allied to *T. incurvus*, but is less convex, and the thorax is less distinctly rounded at the sides and less retracted behind the middle.

Habitat : Pennsylvania.

T. granarius Dej.—Pale rufo-piceous, shining, antennæ at base and legs testaceous: thorax strongly rounded at sides, and retracted behind the middle, hind angles strongly obtuse, not rounded, basal

impression deep; elytra convex, smooth, with two fine punctures, sutural stria almost touching the base, marginal stria broadly interrupted. Length, 2 mm.

Habitat: Pennsylvania, District of Columbia, Georgia, Illinois. Resembles *T. xanthopus* but lacks the second sutural stria; it is also smaller and paler in color.

T. gemellus Casey.—Slender, convex, dark rufous, base of antennæ and legs testaceous; thorax broader than long, sides rounded; feebly sinuate before the hind angles, which are obtuse, median line fine; elytra scarcely wider than the thorax, sutural stria fine, with traces of a second stria. Length, 2.4 mm.

Habitat: New Jersey (Cape May).

T. dolosus Lec.—Pale rufous, elongate, convex; thorax rather flattened, quadrate, sides slightly rounded; posterior transverse impressions deep, finely punctate; base deep, more marked at the angle; elytra broader than the thorax, elongate, smooth, distinctly bipunctate; sutural stria almost touching the base, marginal stria interrupted. Length, 2.25 mm.

Habitat: Massachusetts, District of Columbia, Illinois, Missouri, Arizona, Texas.

T. fuscicornis Chd.—Entirely reddish brown, with the last seven joints of the antennæ fuscous. Thorax of the form of *granarius*, with the rounded sides directed obliquely towards the base; hind angles a little prominent and acute; transverse basal impressions less deep, and has but one puncture at the middle. Elytra elongate, like those of *dolosus*, but the sides are more rounded and above are more convex. Length 2.5 mm.

(To be Continued.)

SOME SYRPHIDÆ FROM LONG ISLAND.

BY NATHAN BANKS.

The flies in the list given below were taken within a few miles of Sea Cliff, L. I., N. Y. The island, or at least this portion, is not so rich as the adjacent mainland in this group of insects. Specimens are usually more rare here, and species common elsewhere are unknown, or at least uncommon, here. Such, for example, is the case with the two large species of *Heliophilus*, with *Syrphus torvus*, *Mesograpta geminata*, and others. Along the shore we find two characteristic species. *Eristalis æneus* and *Triodonta curvipes*. Among the more interesting